

READING ASSESSMENT SYSTEM ON ONLINE
(RASO)

NOR SAZANA BINTI MOH SAHAIMI

Report submitted in partial fulfilment of the requirements for the award of the degree of
Bachelor of Computer Science and Software Engineering

Faculty of Computer System & Software Engineering
UNIVERSITI MALAYSIA PAHANG

JUNE 2012

ABSTRACT

The purpose of this project is to develop Reading Assessment System on Online. It is a system that helps teachers and students in the management of reading assessment activity. Reading Assessment activity is an annual activity in the school. The reason to develop the system is due to the issues facing in managing the reading assessment activity. The issues are such teachers need to wait their students submit their book report of reading assessment to them before they can give the report of student's reading assessment to the management, students need to buy the reading assessment book to write their reading assessment, the students also need to find their teacher to submit and show their reading assessment report's book and the organizer of this reading assessment activity facing problem in collecting all the report from each teachers to know whose students have the highest of book reader. Therefore, this system to help teachers minimize task in updating their student's reading assessment report. Besides that, it help teacher in monitoring student reading activity. Furthermore, this system provides a user-friendly web pages and effective data storage to the teachers and students with the advantage of Information and Communication Technology (ICT) in school. The structured methodologies have been chosen to develop the Reading Assessment System on Online. Rapid Application Development (RAD) encouraged the creation of quick and higher of quality through gathering requirements using workshops. The methodology used involved requirements Planning, user design, construction and cutover.

ABSTRAK

Tujuan utama projek ini adalah untuk membangunkan sistem penilaian bacaan secara atas talian. Sistem ini dapat membantu guru dan pelajar dalam pengurusan aktiviti penilaian bacaan. Aktiviti penilaian bacaan merupakan aktiviti tahunan di sekolah. Antara sebab utama mambangunkan sistem ini adalah berikutan daripada isu yang dihadapi dalam pengurusan aktiviti penilaian bacaan pelajar. Isu-isu ini adalah seperti isu pelajar terpaksa menunggu pelajar-pelajarnya menghantar buku laporan penilaian bacaan kepada mereka sebelum para guru dapat manghantar laporan penilaian bacaan pelajar kepada pengurusan, pelajar perlu membeli buku penilaian bacaan untuk menulis penilaian bacaan mereka, para pelajar juga perlu mencari guru-guru mereka untuk menghantar dan menunjukkan buku laporan penilaian bacaan mereka dan penganjur aktiviti penilaian bacaan pelajar menghadapi masalah dalam mengumpulkan semua laporan daripada setiap guru untuk mengetahui siapakah pelajar yang mendapat bacaan buku tertinggi. Oleh demikian, sistem ini membantu mengurangkan kerja guru dalam mengemas kini laporan penilaian bacaan pelajar mereka. Selain itu, sistem ini membantu guru dalam pemantauan aktiviti bacaan pelajar. Tambahan pula, sistem ini menyediakan muka rangkaian yang mudah diguna serta keberkesanan dalam penyimpanan data untuk guru dan pelajar dengan kelebihan Teknologi Maklumat dan Komunikasi (ICT) di sekolah. Methodologi berstruktur telah digunakan untuk membangunkan sistem penilaian bacaan atas talian ini. Pembangunan Aplikasi Pantas (RAD) mangalakkan penciptaan cepat dan lebih tinggi kualiti melalui pengumpulan keperluan menggunakan bengkel. Methodologi ini melibatkan sistem perancangan keperluan, reka bentuk pengguna, pembinaan dan memotong alih.

TABLE OF CONTENTS

	Page
SUPERVISOR’S DECLARATION	ii
STUDENT’S DECLARATION	iii
ACKNOWLEDGEMENTS	iv
ABSTRACT	v
ABSTRAK	vi
TABLE OF CONTENTS	vii
LIST OF TABLES	x
LIST OF FIGURES	xi
 CHAPTER 1 INTRODUCTION	
1.1 Background	1
1.2 Problem Statement	2
1.3 Objectives	3
1.4 Scope of Study	3
1.5 Thesis Organization	4
 CHAPTER 2 LITERATURE REVIEW	
2.1 Existing System	5
2.1.1 Portal Laman Web Sistem Tarantula: i-NILAM	5
2.1.2 Portal Blog Laman Ilmu Edu4u “Pendidik Generasi Sepanjang Hayat”	7
2.1.3 Portal Laman Web Rasmi SRK. Konven St. Francis, Kota Kinabalu	11
2.1.4 Comparison between Portal Laman Web Sistem Tarantula: i-NILAM, Portal Blog Laman Ilmu Edu4u “Pendidik Generasi Sepanjang Hayat” and Portal Laman Web Rasmi SRK. Konven St. Francis, Kota Kinabalu	14
2.2 Techniques	17
2.2.1 Web Applications	17
2.2.2 Knowledge Management	18

2.2.3	Knowledge Management System	18
2.2.4	Knowledge Portal	19
2.2.5	Online Reading Assessment	20
2.2.6	Operating systems	21
2.2.7	Web browser	22
2.2.8	Content Management System Software	24
2.3	Tools For Create Dynamic and Interactive Web Pages	24
2.3.1	Comparison between ASP.NET, PHP and JSP	24
2.4	Database Language	25
2.4.1	Comparison between Database Language: MySQL and Oracle	25
2.5	Software development Methodology	26
2.6	Summary	26

CHAPTER 3 METHODOLOGY

3.1	Rapid Application Development (RAD)	27
3.2	Requirements Planning	28
3.3	User Design	33
3.3.1	System Module	33
3.3.1.1	Login/ Logout module	33
3.3.1.2	View students Reading Assessment Module	34
3.3.1.3	Online Reading Assessment module	35
3.3.2	Database Design	37
3.4	Construction	39
3.5	Cutover	41
3.6	Development Tools	41
3.6.1	Hardware Requirement	42
3.6.2	Software Requirement	42
3.7	Conclusion	44

CHAPTER 4 IMPLEMENTATION

4.1	System Interface	46
4.2	Scripting Language	48
4.2.1	Declaration of Variable in PHP	48
4.2.2	SQL Statements	48

CHAPTER 5 RESULTS, DISCUSSION AND CONCLUSION

5.1	Introduction	50
5.1.1	The participation of the students	50
5.1.2	The improvement of reading among students	50
5.1.3	The efforts of school teachers	51
5.2	Constraint	51
5.3	Further Research	52
5.4	Conclusion	52

REFERENCES	54
-------------------	----

APPENDICES

A	Gantt Chart	57
B	User Manual	59
C	SRS Document	-
D	SDD Document	-

LIST OF TABLES

Table No.	Title	Page
2.1	Comparison between three existing system	15
2.2	View of the various time format used by web browser	23
2.3	View of recovery method for deleted information	24
2.4	Comparison between ASP.NET, PHP and JSP	25
2.5	Comparison between MySQL and Oracle	26
3.1	LOGIN Data Dictionary	37
3.2	STUDENTREGISTRATION Data Dictionary	37
3.3	TEACHERREGISTRATION Data Dictionary	38
3.4	ADMIN Data Dictionary	38
3.5	NILAM Data Dictionary	38
3.6	Hardware Requirement for RASO	42
3.7	Software Requirement for RASO	42
4.1	Explanation of the System Modules	46

LIST OF FIGURES

Figure No.	Title	Page
2.1	View of homepage for Portal Laman Web Sistem Tarantula: i-NILAM	6
2.2	[continue] View of homepage for Portal Laman Web Sistem Tarantula: i-NILAM	7
2.3	View of homepage for Portal Blog Laman Ilmu Edu4u “Pendidik Generasi Sepanjang Hayat”	8
2.4	View of the material of collection for the writer for Portal Blog laman Ilmu Edu4u “Pendidik Generasi Sepanjang Hayat”	9
2.5	View of the Program of Reading Assessment (NILAM) for Portal Blog Laman Ilmu Edu4u “Pendidik Generasi Sepanjang Hayat”	10
2.6	View of homepage for Portal Laman Web Rasmi SRK. Konven St. Francis, Kota Kinabalu	11
2.7	View of NILAM page for Portal Laman Web Rasmi SRK. Konven St. Francis, Kota Kinabalu	12
2.8	View of Student Award of the Book Reading for SRK. Konven St. Francis, Kota Kinabalu	13
2.9	View of the input, process and output of online reading assessment	21
3.1	Rapid Application Development (RAD)	28
3.2	RASO Context Diagram	29
3.3	RASO Use Case diagram	31
3.4	Flow chart of Reading Assessment System on Online	32

3.5	Login Use Case Diagram	34
3.6	View of students reading assessment use case	35
3.7	Online Reading Assessment Use Case diagram	36
4.1	Interface of Login System	46
4.2	Interface of Student's Reading Assessment	47
4.3	Report Student's Reading Assessment	47
4.4	Declaration of Student's Reading Assessment	48
4.5	INSERT SQL Statement	48
4.6	SELECT SQL Statement	49
4.7	UPDATE SQL Statement	49
4.8	DELETE SQL Statement	49
5.1	Interface of View Student Reading Assessment	51

CHAPTER 1

INTRODUCTION

This chapter briefly discuss on the overview of research of Reading Assessment System on Online Using Web Application. It contains of five sections. First section is the background of the research which is contain of today's current issue on reading assessment. Second section is the problem statement which is the cause of this system will develop. The third is the objective of the developing the system. The forth is the scope of the system and the last section is the thesis organization of this research.

1.0 BACKGROUND

Nowadays, most of the schools in Malaysia still using reading's report book manually as their method to encourage reading habit among students. Unfortunately it is not efficient and not interested to the students. The reading's report book may cause many problems to students and teachers for example the students lost their reading's report book and need to buy a new one if they want to make their reading's report. This may waste their money and they will lose their past reading report. For teachers, there is no much reading method to improve the reading culture among their students.

In case of that, Reading Assessment System on Online shall be developed based on the problems happen. This system has facilities for students and teachers to foster reading culture in the reading method. Moreover, this system has three levels of user, which are the admin, school teachers and the students without got problem like lost of book or teachers think how to improve their students. The admin will control the system in planning and implementing the Online Reading Assessment System. The school

teachers are responsible in check and evaluate the student's reading assessment while the students record their readings.

Furthermore, the Reading Assessment System on Online is an integration of all reading activities in schools with the aim of encouraging continuous reading and to inculcate the reading habit. It is a program that gives recognition to those who read. It is mandatory for all primary schools to conduct this program. As can be seen, Malaysia has systematic plans for the development of the Reading Assessment System on Online which keep up with the changes and demands of the world. Steps taken include those from infrastructure, equipment, furniture and staff to skills necessary for building a knowledge-based society. To take advantage of the advance of Information and Communication Technology (ICT) and to maximize its application in libraries, plans are underway for the networking of the States Educational Resource Centre with the hope that the Reading Assessment System on Online will consequently be upgraded to electronic resource centre. With this and online management systems in accordance with the progress in ICT, it is hoped that our students will be well prepared to meet the challenges of the information age and evolve into a knowledge based society in line with our Prime Minister's Vision 2020.

1.1 PROBLEM STATEMENT

The reading's report book manually is not effective because most of the students do not interested when they need to write the summary of what they have read and submit to their teacher. When they want to write again, they need to take from their teacher. Sometimes, the students forgot where they put their reading assessment book when the book with them. If the teacher asked them to write the reading assessment report, they need to buy a new one of reading assessment book.

The teachers always find the way how to inculcate the reading habit among their students and how to make their student keep maintain in reading. Moreover, there is no person who wants to handle the reading assessment contest when he/she needs to get all the data of students from every teacher who participate in checking the students reading's report book.

1.2 OBJECTIVE

Objectives of this project are:

- i. To help teachers minimize their task in updating their student reading assessment.
- ii. To help teachers and admin in monitoring student reading assessment.
- iii. To simplify the management award of reading contest.

1.3 SCOPE

The scopes of this project are categories into four which are scope of user, scope of technique, scope of system, and scope of place. For the scope of user, there are three users in this system, which are admin, teachers and students. The admin of the system is responsible to make sure that all data is work properly and manage the student's readings contest using this system. The teachers are responsible to make sure that their students involved in the reading assessment and the school teacher are responsible to give their comment about their student's reading assessment. The class teachers will take part in this. The students are responsible to use this system as their record of their reading's assessment. All the students can use this system because this system is easy for use and suitable for primary school students. Students also must always have a reading material no matter where.

For the scope of technique, this system will use Reading Rubric Assessment Technique where teachers are given the criteria in marking the student's reading assessment report. The students also may know where is their weaknesses in writing.

For the scope of system, this system will use a web based system. The admin, students and teachers can view the system everywhere and anytime. The last but not least is the scope of place. This system will be used and testing in a primary school of Sekolah Kebangsaan Sultan Ibrahim Dua(2), Pasir Mas, Kelantan.

1.4 THESIS ORGANIZATION

This thesis contains of six chapters. In Chapter One, it is about the introduction of the study that had been conducted. It consists of overview, problem statements, objectives and the scope of study. In Chapter Two, it is about Literature Review. This chapter will discuss about all the references such as articles, books and journals. In Chapter Three, it will more focuses about the methodology of the system development. The implementation of the system will be in Chapter Four. Chapter Five concentrates on the result, discussion and conclusion.

CHAPTER 2

LITERATURE REVIEW

This chapter briefly describes the review on existing techniques related with Reading Assessment System on Web Development that will be developed later. This chapter comprises two sections: The first section describes the comprehensive review on existing related systems. The second section describes the review on method, equipment, and technology previously used in the same domain.

2.1 EXISTING SYSTEM

This section is to review the current and the existing system that related to reading assessment system on online.

2.1.1. Portal Laman Web Sistem Tarantula: i-NILAM

iQ-PSS is an abbreviation for the Indeks Kualiti Pusat Sumber Sekolah used adopted as a standard index for measuring performance support School Resource Center the Malaysian government. iQ-PSS translate the qualitative criteria PSS (Pusat Sumber Sekolah) to the quantitative performance index so that the quality of performance of a PSS can be measured in a uniform and made an analysis to identify strengths and PSS weakness in planning actions and improvements in terms of money, the supply of materials (collectively) PSS, equipment, training programs, Information Trails program and etc in order to implemented more effectively and achieve future goals. Process involved in the program iQ-PSS was the center rating School Resources for

government-aided schools throughout Malaysia [1]. One of the examples is Portal Laman Web Sistem Tarantula: i-NILAM [2].

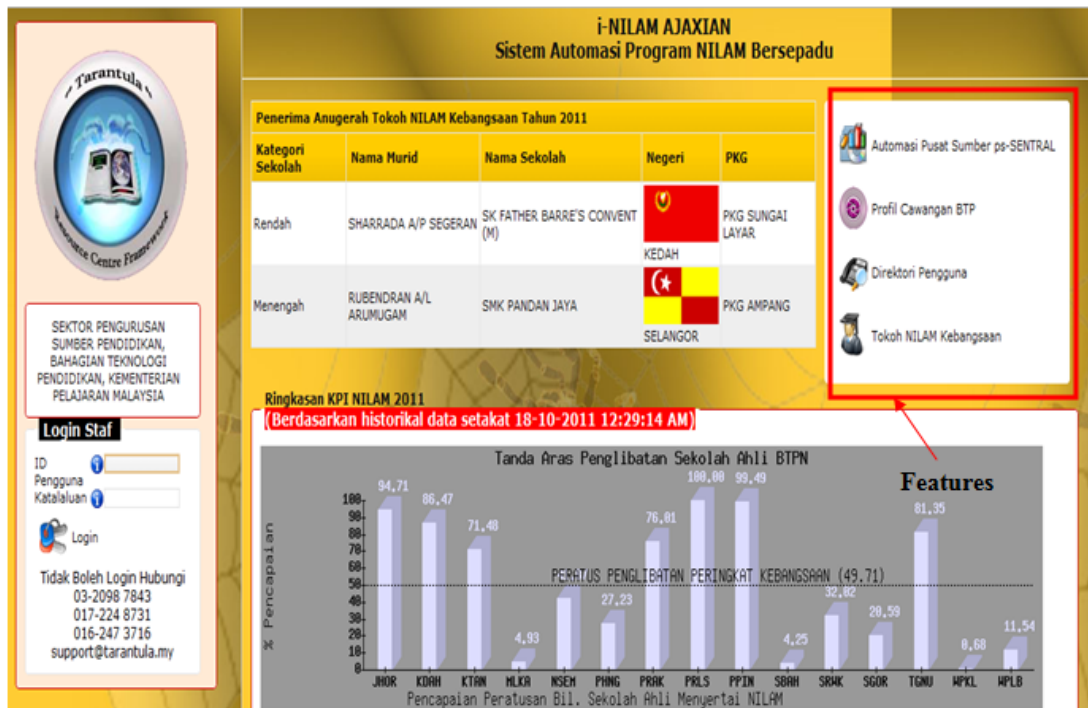


Figure 2.1: View of homepage for Portal Laman Web Sistem Tarantula: i-NILAM

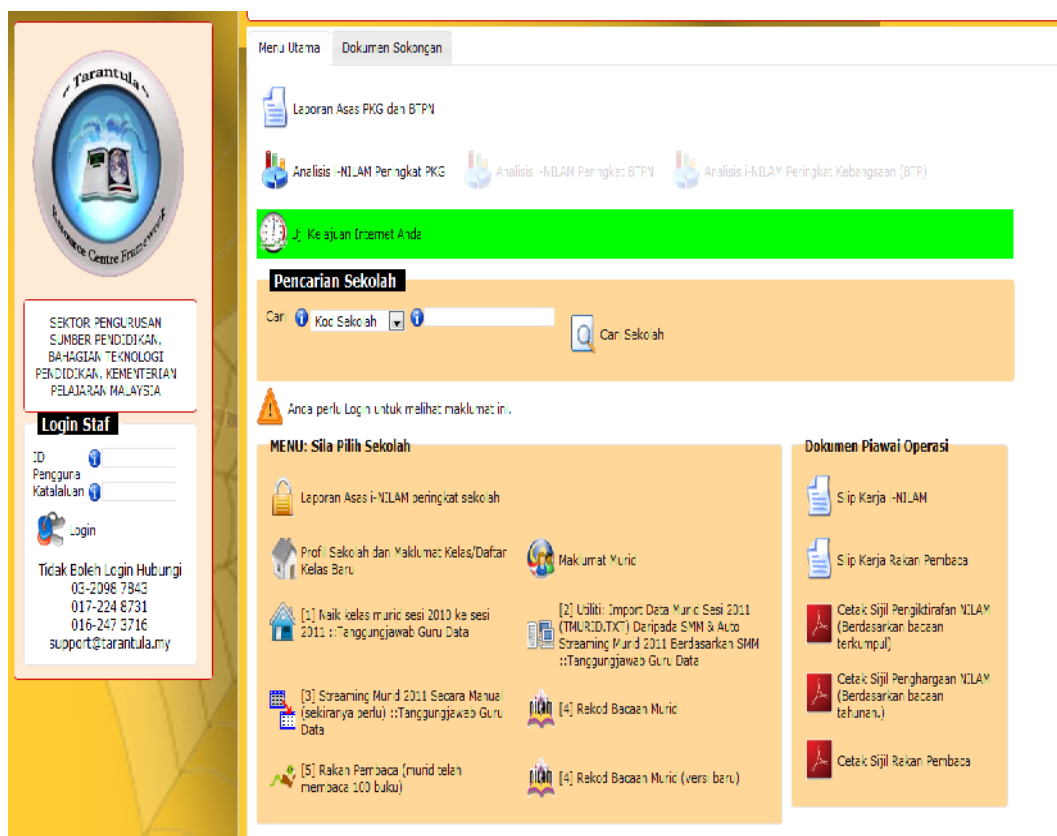


Figure 2.2: [continue] View of homepage for Portal Laman Web Sistem Tarantula: i-NILAm

2.1.2. Portal Blog Laman Ilmu Edu4u “Pendidik Generasi Sepanjang Hayat”

This portal is lack of program of reading assessment but some information about reading assessment does have in this portal and it can be as reference. This blog is featuring a guide, news, scientific literature and other education related to current educational, especially in the interior of Sabah and sharing for all. As a student, of course the main focus is to learn. Thus, by reading the students can gain the knowledge and information towards a brighter future. This can be proved by the academic performance of a student who is always at a better level. Through a good reading, the students can train and make the students more disciplined and become a role models and excellent human capital [3].



Figure 2.3: View of homepage for Portal Blog Laman Ilmu Edu4u “Pendidik Generasi Sepanjang Hayat”

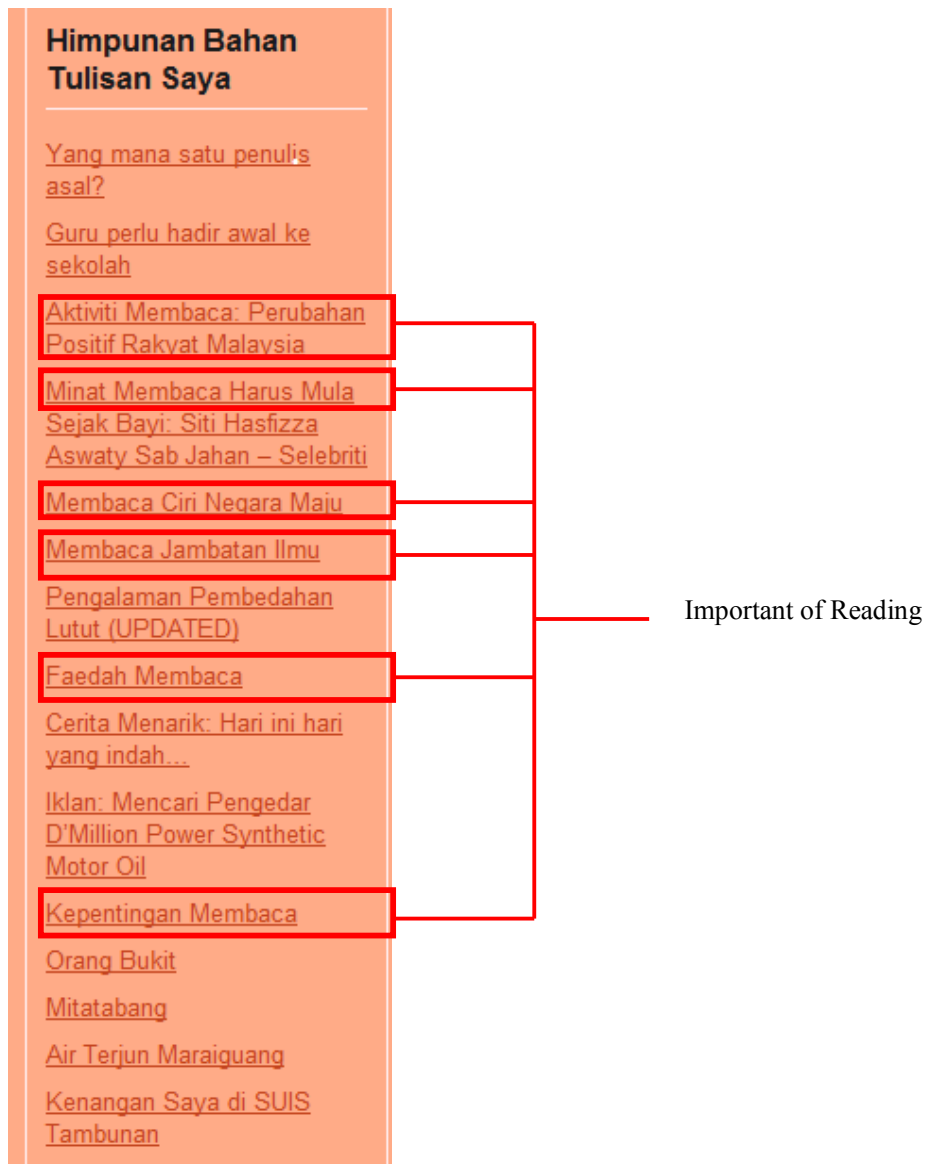


Figure 2.4: View of the material of collection for the writer for Portal Blog laman Ilmu Edu4u “Pendidik Generasi Sepanjang Hayat”

[edublogs](#)
[Log In](#)

Himpunan Bahan Tulisan Saya

[Yang mana satu penulis asai?](#)
[Guru perlu hadir awal ke sekolah](#)
[Aktiviti Membaca: Perubahan Positif Rakyat Malaysia](#)
[Mirat Membaca Harus Mula Sejak Bayi: Siti Hafizah Aswaty Sabu Jahan – Selebriti](#)
[Membaca Ciri Negara Maju](#)
[Membaca Jambatan Ilmu](#)
[Pengalaman Pemecahan Lutut \(UPDATED\)](#)
[Faedah Membaca](#)
[Cerita Menarik: Hari ini hari yang indah...](#)
[Ikuti: Mencari Pengedar DMiles Power Surabaya](#)

Bengkel ini dianjurkan oleh PKG Daerah Keningau dan diadakan di Bilik Trus Madi, PKG Keningau. Di dalam bengkel ini, seramai 50 orang guru GPM dan PSS sekolah-sekolah rendah dan menengah Daerah Keningau telah diadakan dengan persiapan dan persediaan yang harus mereka lakukan menjelang sesi persekolahan pada tahun 2010. Di antara persiapan yang perlu dilakukan ialah:

Pengurusan PSS:

- Carta organisasi: PSS
- Carta organisasi: PGM
- Sistem fail
- Fai kuasa
- Takwim tahunan
- Kawangan
- Memastikan peralatan PSS mencukupi

Aktiviti PSS 2010:

- Program Galakan Membaca (PGM):
- NILAM – Sepanjang tahun
- NILAM – Penghantaran Laporan 2 kali setahun (Juni dan Oktober)
- PGM (Kem Membaca 1 Malaysia) – Laporan
- Aktiviti Panitia Mata Pelajaran (Teras)
- PGM – Pengisian selepas peperiksaan UPSR dan PMR
- Anugerah NILAM peringkat sekolah

[Lagi tentang bengkel ini di sini](#)

Kalendar

Oktober 2011

I	S	R	K	J	S	A
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
31						

[« Mei](#)

Pautan Kegemaran

[Blog Abu Miftah](#)
[Blog Ahadir Akub](#)
[Blog Al-Ghazali](#)
[Blog ERAKITA](#)
[Blog Etuza](#)

Reading assessment activities

Figure 2.5: View of the Program of Reading Assessment (NILAM) for Portal Blog Laman Ilmu Edu4u “Pendidik Generasi Sepanjang Hayat”

Created with

nitroPDF professional

download the free trial online at nitropdf.com/professional

2.1.3. Portal Laman Web Rasmi SRK. Konven St. Francis, Kota Kinabalu

Portal Laman Web Rasmi SRK Convent Francis has been moving forward in tandem with the development of national education. The library of SRK Convent St. Francis has played an important role as a driving force to promote academic excellence and cultural discovery of knowledge in this school. In this school, program of reading assessment was conducted aims to realize not only among students but also teachers and parents on the importance of reading culture. [4]



Figure 2.6: View of homepage for Portal Laman Web Rasmi SRK. Konven St. Francis, Kota Kinabalu



Figure 2.7: View of NILAM page for Portal Laman Web Rasmi SRK. Konven St. Francis, Kota Kinabalu

SISTEM GANJARAN	
TAHUNAN - BUKU REKOD KEMAJUAN	
•TAHAP JAUHARI	
<i>SEKOLAH RENDAH</i>	
JUMLAH BACAAN/BUKU	PENGIKTIIRAFAN
<i>90 - 179</i>	<i>GANGSA</i>
<i>180 - 269</i>	<i>PERAK</i>
<i>270 - 359</i>	<i>EMAS</i>
<i>360 KE ATAS</i>	<i>NILAM</i>
•RAKAN PEMBACA (RP)	
MARKAH	PENGIKTIIRAFAN
<i>100 - 199</i>	<i>GANGSA</i>
<i>200 - 299</i>	<i>PERAK</i>
<i>300 - 399</i>	<i>EMAS</i>
<i>400 KE ATAS</i>	<i>NILAM</i>

Figure 2.8: View of Student Award of the Book Reading for SRK. Konven St. Francis, Kota Kinabalu

2.1.4. Comparison between Portal Laman Web Sistem Tarantula: i-NILAM, Portal Blog Laman Ilmu Edu4u “Pendidik Generasi Sepanjang Hayat” and Portal Laman Web Rasmi SRK. Konven St. Francis, Kota Kinabalu

In the Portal Laman web Sistem Tarantula: i-NILAM, there is provided reading's assessment report after the school have registered with Tarantula's company. In this web system was provided the process of using this reading's assessment report on online in the journals and papers that provided, so that the user can easily download and learn from it. Not much things can explore because login part is needed. Means that this application is one of protected system that keep the record of the student's reading's assessment safe.

In the Portal Blog Laman Ilmu Edu4u “Pendidik Generasi Sepanjang Hayat”, there is a portal that share about student's reading's assessment in a school. It is not an application that used to provide reading's assessment system but this portal viewed and shared everything about reading and the program of reading's assessment. General users can view the portal without login phase. Everything that the owner of the portal blog shared can be viewed by the users. It is not too much things that can found in this portal because it is not application but a sharing site.

In the Portal of Laman Web Rasmi SRK. Konven St. Francis, Kota Kinabalu, there is a portal that provided the information about the school's library including student's reading's assessment. This portal does not have many things about reading's assessment. This portal just only viewed the library program such as reading's assessment program. All the students in the school must take part in the assessment and the class teacher must control the student's reading's assessment and help the students in chosen the right book they can read.

No.	Features	Portal Laman Web Sistem Tarantula: i-NILAM	Portal Blog Laman Ilmu Edu4u “Pendidik Generasi Sepanjang Hayat”	Portal Laman Web Rasmi SRK. Konven St. Francis, Kota Kinabalu
1.	Reading Assessment product profiling	This portal provided reading’s assessment report that can be used for the school that registered the system.	This portal viewed the important of reading assessment and others information like program that was held.	This portal is about the information of the program library for SRK. Konven St. Francis including reading assessment.
2.	Target users	General (all registered users)	It is not available in this portal.	It is not available in this portal.
3.	Reading’s assessment report expert profiling	The Home of Tarantula with cooperation Sektor Pengurusan Literasi Teknologi Pendidikan Kementerian Pelajaran Malaysia.	The details for reading’s assessment report expert profiling is not available in this portal.	The details for reading’s assessment report expert profiling is not available in this portal.
4.	Process of making reading’s assessment report	The process of making reading’s assessment book on online is available in this portal inside i-nilam-panduan kemaskini rekod bacaan murid.pdf [5]	The process of making reading’s assessment book on online is not available in this portal	The process of making reading’s assessment book on online is not available in this portal
5.	Risk as a developer of reading’s assessment report	It is not available in this portal	It is not available in this portal	It is not available in this portal
6.	Success stories for the students	Success stories for the students are available in this portal.	Success stories for the students are available in this portal.	Success stories for the students are available in this portal.
7.	Suppliers and customers	There is providing application as the directory. Users need to download the files.	It is not available in this portal	It is not available in this portal
8.	Product pricing	The product pricing is available in this portal	The product pricing is not available in this portal	The product pricing is not available in this portal